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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Alfred Tom

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09/04/2008

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EXAMINER

LU, ZHIYU

ART UNIT

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2618

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/606,178	Applicant(s) TOM, ALFRED	
	Examiner ZHIYU LU	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/27/2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 48-50 and 55-57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in filed specification regarding “a second list of elements, wherein each element of the second list of elements describes a level of support the shell has for each wireless service” and “position of the value in the list reflects a service identifier of the corresponding wireless service”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 43-45 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Vilppula et al. (US Patent#6961587) and Johansson et al. (US Patent#5418837).

Regarding claim 43, Thompson teaches a composite wireless device comprising:

a shell (50 of Fig. 2) having non-wireless hardware components (68, 70 of Fig. 8), memory (284 of Fig. 8), and system software, wherein the system software includes an operating system, software drivers, and one or more software applications, and wherein the memory stores a service array (column 3 lines 28-29, 32-36, column 10 lines 23-25); and

a cartridge (100 of Fig. 2) removably coupled to the shell through an interface (106 of Fig. 10) and having wireless hardware components and call-processing software to communicate with the system software (column 14 lines 45-62) and to access a wireless communication service, wherein the call-processing software informs the shell which wireless service is supported and the system software of the shell determines whether the wireless service supported by the cartridge is registered with any software application through the service array, the service array containing a correlated list associating an identifier for each software application with respective identifiers of one or more wireless services accessed by each software application (list, 60f of

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Fig. 8, column 15 lines 56 to column 16 line 54, which obviously interprets as linkage between software application and system software that manages hardware drivers).

But, Thompson does not expressly disclose the correlated list generated through a registration process in which each application registers for at least one wireless service; and communicating upon coupling of said cartridge with the shell.

Nevertheless, it would have been obvious to one of ordinary skill in the art to recognize that each software application must register or identify with the system software before usage. Otherwise, software application cannot be used or relayed to hardware application.

Vilppula et al. teach a shell comprises the service array containing a correlated list associating an identifier for each software application with respective identifiers of one or more wireless services accessed by each software application, the correlated list generated through a registration process in which each application registers for at least one wireless service (30, 32, 34 and 36 of Fig. 2, column 5 lines 37-50).

Johansson et al. teaching having call-processing software communicates with operating system software in response to coupling of cartridge with shell (column 2 lines 50-57, column 6 lines 38-42, Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate having a service array that contains wireless service related software in shell taught by Vilppula et al. and actuating communication between shell and cartridge upon coupling taught by Johansson et al., into the composite wireless device of Thompson, in order to enable wireless communication function in the shell itself and provide automatic data communication.

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Regarding claim 51, Thompson, Vilppula et al., and Johansson et al. teach a method as explained in response to claim 43 above.

Regarding claims 44 and 52, Thompson, Vilppula et al., and Johansson et al. teach the limitations of claims 43 and 51.

Thompson teaches wherein the non-wireless hardware components are selected from the group consisting of keypad, graphic display element, battery, speaker, and microphone (Fig. 8).

Regarding claims 45 and 52, Thompson, Vilppula et al., and Johansson et al. teach the limitations of claims 44 and 51.

Thompson teaches wherein the wireless hardware components are selected from the group consisting of baseband circuit, radio frequency component, and antenna (Fig. 8).

4. Claims 46-50 and 53-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Vilppula et al. (US Patent#6961587), Johansson et al. (US Patent#5418837), and Baum et al. (US Patent#4979098).

Regarding claims 46 and 53, Thompson, Vilppula et al., and Johansson et al. teach the limitations of claims 43 and 52.

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Thompson, Vilppula et al., and Johansson et al. teach wherein the registration process for an application comprises: storing the application identification in a service request list (menu, 60f of Fig. 8 of Thompson); and communicating with the application through a function return call (obvious in relaying menu selection and selected application).

But, Thompson, Vilppula et al., and Johansson et al. do not expressly disclose assigning the application a client identification number.

Baum et al. teach assigning the application a client identification number (ASN number, column 17 lines 53-68), which controls direct access to application location.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate assigning application identification number taught by Baum et al. into the device and method of Thompson, Vilppula et al., and Johansson et al., in order to ease application management and provide access security.

Regarding claims 47 and 54, Thompson, Vilppula et al., Johansson et al., and Baum et al. teach the limitations of claims 46 and 53.

Thompson, Vilppula et al., Johansson et al., and Baum et al. teach wherein the shell includes a sub-routine to determine if a selected application software is operable with the supported wireless communication service by receiving the wireless service identifier from the application software regarding which wireless communication service is to be used based on the registration, and to compare the wireless service identifier with an identifier provided by the call-processing software, and further to notify the application software that an identified wireless service is

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available (e.g. version identifier, column 4 lines 7-23, column 16 lines 5-35 of Thompson; column 5 lines 37-64 of Vilppula et al.; column 6 line 65 to column 7 line 6 of Johansson et al.).

Regarding claims 48 and 55, Thompson, Vilppula et al., and Johansson et al. teach the limitations of claims 43 and 54.

But, Thompson, Vilppula et al., and Johansson et al. do not expressly disclose wherein the shell further includes a second list of elements, wherein each element of the second list of elements describes the level of support the shell has for each wireless service.

Baum et al. teach including a second list of elements, wherein each element of the second list of elements describes the level of support the shell has for each program service (column 5 line 8 to column 8 line 14, where program access list identifies authority level and access to address space for program), which obviously to be incorporated into the device and method of Thompson as address space support for the wireless service to run.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate managing a list of elements describes address space support computer has for each program service taught by Baum et al. into the device and method of Thompson, Vilppula et al., and Johansson et al., in order to ease application management and provide access security.

Regarding claims 49 and 56, Thompson, Vilppula et al., Johansson et al., and Baum et al. teach the limitations of claims 48 and 55.

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Baum et al. teach wherein each element of the second list is a single value, and wherein the value determines the level of support for a wireless service (access authority), and further wherein the position of the value in the list reflects a service identifier (each element in the list identifies an address for data or program/service) of the corresponding wireless service (column 13 lines 19-30, column 18 lines 25-41).

Regarding claims 50 and 57, Thompson, Vilppula et al., Johansson et al., and Baum et al. teach the limitations of claims 48 and 56.

Thompson, Vilppula et al., Johansson et al., and Baum et al. teach wherein the shell sends the second list of elements to the cartridge and the cartridge uses this second list to determines which wireless services the device is able to support (column 13 lines 3-18 of Baum et al., where obviously the cartridge has to obtain the info in access register to access address space where programs such as drivers locate or spaces application can utilize).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZHIYU LU whose telephone number is (571)272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. L./
Examiner, Art Unit 2618

/Nay A. Maung/
Supervisory Patent Examiner, Art Unit
2618

Zhiyu Lu
August 20, 2008